

ABSTRACT

A wound closure apparatus having a housing that contains a vacuum pump and a chamber for holding a disposable wound fluid collection canister. The canister resides within the chamber and connects at an outlet with the vacuum pump at an inlet with a porous wound pad. The pad is placed over or within a wound and adhesively secured thereto. When the vacuum pump activates, it evacuates air from the canister resulting in wound fluids flowing from the wound into the canister. Due to the negative effect that a vacuum can impose on tissue when granulation tissue is pulled into the pad, the pad contains multiple pore sizes to prevent granulation tissue from migrating into the pad. The pad has an outer surface adjacent the wound with pore sizes of a diameter of approximately 100 microns or less to prevent tissue from growing into the pad and is treated for biocompatibility.